

FIG.1

FIG.2

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DEVICE IDENTIFIER	STORAGE PORT IDENTIFIER	CHANNEL ADAPTER IDENTIFIER	COMPUTER PORT IDENTIFIER
H R400 1111 0101	WWN1	1	WWNA
H R400 1111 0102	WWN2	1	WWNB
H R400 1111 0103	WWN1	1	WWNA
H R400 1111 0104	IPAddress3	2	IPAddressD

⋮

FIG.3





	EXCESSIVELY LARGE ALLOCATION CAPACITY	PROPER ALLOCATION CAPACITY	EXCESSIVELY SMALL ALLOCATION CAPACITY
COMPUTER 1		 	
COMPUTER 2			
COMPUTER 3			
⋮			

FIG.4A

900

DATA IDENTIFIER	APPLICATION KIND	COMPUTER IDENTIFIER	CAPACITY	LOWER LIMIT SECURING RATIO	UPPER LIMIT SECURING RATIO	CAPACITY COLLECTION YES/NO	ALLOCATION STATE
ID1	GENERAL	COMPUTER ₁	20GB	110	120	YES	PROPER
ID2	DATABASE	COMPUTER ₂	80GB	120	130	YES	EXCESSIVELY SMALL
ID3	FILE SERVER	COMPUTER ₃	40GB	120	130	YES	EXCESSIVELY LARGE
ID4	DATABASE	COMPUTER ₁	40GB	105	115	NO	PROPER

FIG.4B

970

APPLICATION KIND	ADDITION SECURING RATIO	ADDITION SECURING WIDTH
GENERAL	+5	+5
DATABASE	+10	+5
FILE SERVER	+20	+10
ARCHIVE	+0	+2

FIG.4C

980

ACCESS CHARACTERISTICS	ADDITION SECURING RATIO	ADDITION SECURING WIDTH
ONLY READ	+0	+2
READ-WRITE	+5	+5
WRITE ONCE	+10	+2
CHANGE	+5	+10

FIG.4D

990

IMPORTANT DEGREE	ADDITION SECURING RATIO	ADDITION SECURING WIDTH
1	+0	+2
2	+10	+5
3	+20	+10

FIG.5

DATA IDENTIFIER	OBTAINED TIME	USED CAPACITY	OBTAINED PERIOD	MAXIMUM USED CAPACITY	MINIMUM USED CAPACITY	THE NUMBER OF READ TIMES	THE NUMBER OF WRITE TIMES
ID1	2002/10/19 23:00	15GB	3weeks	15GB	13GB	10000	500
ID1	2002/11/09 23:00	16GB	3weeks	16GB	14GB	10000	300
ID1	2002/11/30 23:00	16GB	3weeks	16GB	15GB	10000	400
ID1	2002/12/21 23:00	16GB	3weeks	16GB	14GB	10000	300

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FIG.6

DEVICE IDENTIFIER	CAPACITY	COST	USED COMPUTER
H R400 1111 0101	20GB	HIGH	COMPUTER 1
H R400 1111 0102	80GB	HIGH	COMPUTER 2
H R400 1111 0103	40GB	HIGH	NON-EXISTENCE
H R400 1111 0104	40GB	MIDDLE	NON-EXISTENCE
H R400 1111 0105	40GB	HIGH	COMPUTER 3
H R400 1111 0106	80GB	LOW	NON-EXISTENCE
H R400 1111 0107	40GB	LOW	NON-EXISTENCE
H R400 2222 0102	80GB	MIDDLE	NON-EXISTENCE
H R400 2222 0104	40GB	MIDDLE	COMPUTER 1

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FIG.7A

810

NETWORK IDENTIFIER	PORT IDENTIFIER
1	WWN1
1	WWN2
2	IPAddress3
3	IPAddress4
1	WWN8
1	WWN9
1	WWNA
1	WWNB
2	IPAddressC
2	IPAddressD
3	IPAddressE

FIG.7B

820

NETWORK IDENTIFIER	NETWORK NAME
1	FC1
2	IP1
3	MANAGEMENT IP

FIG.8A

830

STORAGE DEVICE IDENTIFIER	CHANNEL ADAPTER IDENTIFIER	STORAGE PORT IDENTIFIER
H R400 1111	1	WWN1
H R400 1111	1	WWN2
H R400 1111	2	IPAddress3
H R400 1111	2	IPAddress4
H R400 2222	1	WWN8
H R400 2222	1	WWN9

FIG.8B

840

COMPUTER IDENTIFIER	COMPUTER PORT IDENTIFIER
COMPUTER 1	WWNA
COMPUTER 2	WWNB
COMPUTER3	IPAddressC
COMPUTER 4	IPAddressD
MANAGEMENT COMPUTER	IPAddressE

FIG.9

